



Spring 2014 Heroin Prevention Program Pilot: Evaluation Report Executive Summary

Prepared for: Robert Crown Center

Prepared by: Susan Ryerson Espino, Mimi Doll, Alison Mroczkowski, and Denise Roseland
Ryerson Espino Evaluation & Development (REED) Consulting

Editing support provided by: Aisa Gulko
Draft Date: Fall 2014

Contents

Spring 2014 Heroin Prevention Program Pilot: Evaluation Report..... 1

Executive Summary..... 3

 The Context of Concern: The Growing Heroin Problem 3

 Program History 3

 Overview of Current Evaluation..... 4

 Major Findings and Recommendations 5

 District Snapshot of Substance Abuse Programming 5

 Teacher Training 5

 Curriculum Fidelity 6

 Student-Level Findings 6

Conclusions 7

Recommendations 8

Spring 2014 RCC Heroin Prevention Program Pilot

Executive Summary

The Context of Concern: The Growing Heroin Problem

Heroin initiation, use and dependency have been on the rise nationwide.^{1,2} Chicago is a major distribution hub for heroin. In the metro Chicago area, heroin is more accessible and cheaper than ever and has resulted in the highest national rate of ER visits for overdoses.² Heroin use has increasingly become a problem for teens and younger adults. Heroin is highly addictive and variable in purity exposing users to unknown harmful additives. Overdose is a frequent danger for experienced and novice users alike. The life trajectory of heroin users is very poor with high mortality rates. Co-occurring physical and mental health problems are very common. Unemployment, early school exit, criminal victimization and criminal activity characterize the lives of heroin users, further detracting from health and well-being. Relapse is common for those who have sought treatment. In addition, individuals who abuse prescription pain pills are estimated to initiate heroin use at a rate 19 times greater than those without nonmedical pain reliever use.¹

Program History

The RCC Heroin Prevention Program was initiated in 2010 when Roger and Nadeane Hruby awarded a grant to The Robert Crown Center for Health Education (RCC) to develop a heroin and prescription pain pill use education and prevention initiative for local-area high school and middle school youth, parents and teachers. The award was in memory of their grandson, Reed Hruby, who died of a heroin overdose in 2008.

To date RCC has engaged in a concerted effort to develop and evaluate the Heroin Prevention Program with a variety of researchers and evaluators including the Illinois Consortium on Drug Policy at Roosevelt University, The Iowa Consortium for Substance Abuse Research and Evaluation at University of Iowa, Candeo Consulting, Inc. and most recently the REED Consulting Group. Evaluations thus far have helped to refine the goals of the RCC Heroin Prevention Program, explore in greater depth the suburban profile of heroin use, develop curriculum, receive early implementation (formative) feedback and initiate the exploration of outcomes.

¹Muhuri, P.K., Gfoerer, J.C., Davies, M.C. (2013). *Associations of Nonmedical Pain Reliever Use and Initiation of Heroin Use in the United States*. SAMSHA Center for Behavioral Health Statistics and Quality Data Brief. Washington DC.

² Kane-Willis, K. & Schmitz, S.J. (2012). *Heroin Use: National and Illinois Perspectives: 2008-2010*. Illinois Consortium on Drug Policy. Roosevelt University's Institute for Metropolitan Affairs (IAM) in Chicago.

During the 2013-2014 school year the curriculum was refined based on the results of the previous year's formative evaluation. During the refinement process the lessons that were most closely aligned with the major outcomes in the program logic model and were most well-received by students and teachers were identified as the core program. These core lessons served as the minimum implementation requirements for schools to achieve the desired outcomes. All other lessons were optional and could be delivered at each school's discretion. This evaluation is restricted to the results of delivering the core program.

The core program was comprised of five days of lessons for middle school students and six days of lessons for high school students. The content of the lessons included the science of the developing adolescent brain, the impact of drugs, including heroin and prescription pain pills, on the brain, the current trends in heroin and prescription pain pill use, and the health risk behaviors and protective factors associated with opioid abuse. The Heroin Education Program was implemented by classroom teachers, most of whom were responsible for health education in their respective schools. Prior to implementation teachers received training to deliver the program and then received support from RCC staff while they delivered the program to students. Program delivery was comprised of a variety of formats including PowerPoint presentations, group discussion, video and real-life case studies that included social media.

During the spring of 2014, six schools piloted the core lessons for the RCC Heroin Prevention Program. Three participating high schools were asked to pilot a 6-lesson series and three participating middle schools were asked to pilot a 5-lesson series. The lessons addressed topics such as addiction, opiates, self-assessment for heroin abuse risk and skills for starting conversations with peers, parents and trusted adults about heroin use. The foci for the evaluation were to advance the understanding of implementation within school contexts and deepen the exploration of program outcomes on students. Specifically the evaluation aimed to:

- explore existing substance use programming within pilot school districts
- assess fidelity of implementation of refined curriculum
- assess program impacts on:
 - youth knowledge and attitudes about heroin and prescription pain pill usage and addiction
 - youth skills and behavior to avoid heroin and prescription pain pill usage
 - youth communication skills and behavior relative to heroin and prescription pain pill use and addiction

Overview of Current Evaluation

The current evaluation conducted by REED Consulting Group used past work as a foundation upon which to more closely examine fidelity of implementation and student outcomes. The ultimate intent was to

enhance prevention programming prior to bringing it to full-scale implementation and to increase the rigor of the evaluation.

The current report summarizes efforts to explore curriculum fidelity and teacher implementation experiences in addition to efforts to gather background data on district practices relating to substance use prevention. The bulk of the report details student pre and post session knowledge, substance abuse resistance and protective skills, as well as attitudes about substance abuse and the curriculum.

Pilot Participants

The sample of piloting schools was one of convenience. RCC recruited schools with whom they have collaborated in the past. Four suburban school districts in Will, Lake, DuPage and Cook Counties participated in the pilot. Across the four districts, three high schools and three middle schools participated. One of the high school districts (A) and one of the elementary schools districts (D) were racially and economically diverse whereas the other participating districts were predominately White with relatively fewer low income students.

A total of 13 teachers participated in the pilot and delivered the program to approximately 850 students (8th graders and 10th graders). Evaluators were successful at matching 65% of the students' pre and post assessments.

Major Findings and Recommendations

District Snapshot of Substance Abuse Programming

Overall very little was learned at the district level about prior substance use training or substance use instruction for students due to incomplete data. While three of the four districts attempted a district survey, district respondents provided only minimum and often incomplete responses.

Teacher Training

All teachers participating in the pilot completed an online teacher survey about their training and curriculum experiences.

- Teachers reported that training they received supported their implementation of the curriculum and developed their content specific knowledge.
- Teachers expressed strong content-related knowledge, teaching efficacy and comfort with the curriculum.
- Teacher reported successes of the program included videos, case studies and group discussions, while challenges of the program included repetition within the curriculum and dry PowerPoint slides.
- While the data reported here are from a small sample and additional evaluation work is required, it does appear that high school teachers more frequently reported engagement concerns with their students in contrast to middle school counterparts.

Curriculum Fidelity

Very little was learned relative to fidelity using self-report tools.

- A minority of teachers completed the fidelity of implementation instrument (38%).
- High schools appeared to devote less time than planned for the program (80-205 minutes vs. 240 recommended minutes); they interspersed the curriculum with existing health education curriculum, did not teach consecutive lessons and noted some to many modifications.
- In contrast, middle schools reported higher implementation fidelity. Middle school teachers reported more instructional minutes than planned (230-250 minutes vs. 225 recommended minutes). Middle school teachers taught the curriculum over consecutive days and with no to few modifications.

Student-Level Findings

Student Heroin and Prescription Pain Pill Knowledge Knowledge (Defined as students' knowledge about heroin and opiates, substance abuse, and prevention.)

Students as a whole reported statistically significant pre-posttest gains in knowledge, with middle school students' showing a slightly stronger performance than high school students, suggesting that the Heroin Prevention Program influenced students' level of knowledge regarding heroin/prescription pain pill use.

Student Substance Abuse Prevention Self-Efficacy (Defined as students' belief in their own abilities to resist illicit substances.)

Students as a whole reported significant pre-posttest gains in self-efficacy, with middle school students' making slightly stronger gains than high school students, suggesting that the Heroin Prevention Program influenced students' confidence to engage in health-protective behavior.

Student Beliefs Against Opioid Use (Defined as students' beliefs about heroin use and prescription pain pill abuse.)

Beliefs against opioid use did not significantly change from pre-test to post-test for students as a whole, nor for middle school or high school groups alone. This lack of change may be attributable to strong baseline beliefs against opioid use.

Student Substance Abuse Resistance Behaviors (Defined as Students' reported likelihood to engage in resistance and prevention behaviors.)

Like knowledge and self-efficacy, students as a group reported improved anticipated resistance behaviors from pre-test to post-test. Middle school students showed slightly higher post-test resistance behavior than high school students.

Overarching Model

Overall, the Heroin Prevention Program appears to have encouraged positive changes in self-efficacy, knowledge and resistance behaviors related to heroin/prescription pain pills. Changes in self-efficacy, knowledge and strong beliefs predicted increased anticipated resistance behavior.

Student Course Evaluation

A sizeable group of students voiced ambiguous attitudes towards the program (unsure responses) or viewed the program less favorably (disagree and strongly disagree responses).

The limited student enthusiasm for this curriculum may be a reflection of low reported rates of heroin/opioid use among adolescents within the districts or general adolescent attitudes toward health related curriculum in the school. In contrast, teachers reported positive student engagement around real life case studies, videos and group discussions.

Most students either strongly agreed or agreed that their teacher was knowledgeable about heroin and opioids, their teacher related well to students, their teacher shared helpful information about supports and services for teens with drug concerns, and their teacher shared helpful strategies for resisting drugs. These results suggest the program promotes a foundation upon which to build important adult and student conversations about substance use, knowledge, resistance behavior and support.

Conclusions

It appears that the Heroin Prevention Program enhances important aspects of students' lives that predict resistance behavior to heroin and prescription pain medication use. That is to say, once the program encouraged positive changes in self-efficacy, knowledge and beliefs related to heroin/prescription pain pill use, students reported stronger resistance behavior. The scope of this evaluation did not extend to the impact of resistance behavior on actual heroin/opioid use.

Adolescents generally are at a developmental stage where they are interested in experimentation and differentiating themselves from adults; yet they may not be fully capable of realizing all the consequences of their actions. Work must continue to address ways that adolescents can experiment and individuate in a way that is positive and healthy. **There is a strong ongoing need to continue to communicate and raise youth awareness around the potentially fatal consequences of heroin/opioid use and the certain negative impact on their health. It is equally important to help youth build skills to resist drugs and negotiate peer and adult conversations around drugs.**

Recommendations

The intended impacts of this project could benefit from additional exploration around:

Student engagement and learning and curricular enhancements

- Student engagement (overall and at different grade levels) around substance abuse prevention and heroin/opioid use prevention
- Developmental appropriateness of the curriculum
- Further refinements to curriculum to reflect school and age contexts, to refine areas of low engagement and bolster areas of high engagement, and to reduce curricular redundancies

Teacher practices within school contexts

- What is typically offered as general substance use prevention programming and what content related trainings do teacher typically receive?
- Determine best instructional practices during training and implementation and consolidate best practices to share with other schools.
- To enhance uptake of program content, assess opportunities for cross curricular connections and whole school opportunities to reinforce substance abuse prevention curriculum rather than allocating to a health education program or class.

Evaluation processes to establish the program as evidence-based

- This evaluation initiated the exploration and use of reliable and valid measures. We were able to statistically assess significant outcomes thought to protect students from opioid abuse. A long term goal is to submit the Heroin Prevention Program to SAMSHA for designation as an evidenced-based program. Recommendations for future evaluation include: monitor fidelity more closely and intervene when necessary to ensure that participating schools are delivering expected program.
- Observe students more closely during implementation to propose ways to enhance interest and engagement.
- Enhance the rigor of the evaluation through the use of a quasi-experimental design; diverse samples of schools; incorporation of confounding variables and incorporation of assessment of actual substance use protective and risk behaviors.
- Consider long-term follow up to assess the program's durability of results over time. Should benefits lag with time, "booster" sessions or activities may help consolidate students' benefits.
- Disseminate program and evaluate implementation and outcomes across wider range of schools with more diverse students in terms of economics, language and geography.